

IN THE CLAIMS:

1. (Currently Amended) A method for securing cellular telephone transmissions utilizing a conventional cellular telephone, said method comprising the steps of:

providing a conventional cellular telephone, said conventional cellular telephone being incapable of independently encrypting or decrypting signals;

providing a computer system coupled between an external microphone and said conventional cellular telephone, wherein inputs into said conventional cellular telephone are received first by said computer system, said computer system being separate and apart from said conventional cellular telephone;

receiving, within said computer system, an input signal from said external microphone;

encrypting, within said computer system, said input signal utilizing public key encryption to form an encrypted input signal;

passing said encrypted input signal from said computer system to said conventional cellular telephone; and

transmitting said encrypted input signal utilizing said conventional cellular telephone, wherein cellular telephone transmissions from said conventional cellular telephone are secured.

2. (Currently Amended) The method according to claim 1, further comprising the step of encrypting, within said computer system, said input signal utilizing a key pair to form the encrypted input signal, said key pair including a public key and a private key.

3. (Currently Amended) The method according to claim 2, further comprising the step of encrypting, within said computer system, said input signal utilizing said public key to form the encrypted input signal.

4. (Currently Amended) The method according to claim 1, further comprising the steps of:
receiving, within a Java application executing within said computer system, said input signal from said external microphone;
encrypting, utilizing said Java application, said input signal utilizing public key encryption to form the encrypted input signal; and

passing said encrypted input signal from said Java application to said conventional cellular telephone.

5. (Currently Amended) The method according to claim 1, further comprising the step of passing said encrypted input signal from said computer system to a microphone port included in said conventional cellular telephone.

6. (Currently Amended) The method according to claim 1, further comprising the steps of: providing a second conventional cellular telephone, said second conventional cellular telephone being incapable of independently encrypting or decrypting signals;

providing a second computer system coupled between an external speaker and said second conventional cellular telephone, wherein outputs from said second conventional cellular telephone are received first by said second computer system before being output to said speaker, said second computer system being separate and apart from said second conventional cellular telephone;

receiving, within said second computer system, an encrypted output from a speaker port included within said second conventional cellular telephone;

decrypting, within said second computer system, said encrypted output utilizing public key encryption to form decrypted output; and

outputting said decrypted output from said second computer system to said external speaker.

7. (Currently Amended) The method according to claim 6, further comprising the step of encrypting, within said computer system, said input signal utilizing a key pair to form the encrypted input signal, said key pair including a public key and a private key.

8. (Currently Amended) The method according to claim 7, further comprising the step of encrypting, within said computer system, said input signal utilizing said public key to form the encrypted input signal.

9. (Currently Amended) The method according to claim 8, further comprising the steps of: obtaining, by said second computer system, said private key of said computer system; and decrypting said encrypted input signal utilizing said private key to form decrypted input.
10. (Currently Amended) The method according to claim 9, further comprising the step of exchanging said private key between said computer system and said second computer system prior to ~~transmissions~~ transmission of cellular telephone signals.
11. (Currently Amended) A system for securing cellular telephone transmissions utilizing a conventional cellular telephone, comprising:
- a conventional cellular telephone, said conventional cellular telephone being incapable of independently encrypting or decrypting signals;
 - a computer system coupled between an external microphone and said conventional cellular telephone, wherein inputs into said conventional cellular telephone are received first by said computer system, said computer system being separate and apart from said conventional cellular telephone;
 - said computer system ~~for~~ capable of receiving an input signal from said microphone;
 - said computer system ~~for~~ capable of encrypting said input signal utilizing public key encryption to form an encrypted input signal;
 - said computer system ~~for~~ capable of passing said encrypted input signal from said computer system to said conventional cellular telephone; and
 - said conventional cellular telephone ~~for~~ capable of transmitting said encrypted input signal, wherein cellular telephone transmissions from said conventional cellular telephone are secured.
12. (Currently Amended) The system according to claim 11, ~~further comprising wherein~~ said computer system ~~for~~ is capable of encrypting said input signal utilizing a key pair to form the encrypted input signal, said key pair including a public key and a private key.

13. (Currently Amended) The system according to claim 12, ~~further comprising wherein~~ said computer system ~~for~~ is capable of encrypting said input signal utilizing said public key to form the encrypted input signal.

14. (Currently Amended) The system according to claim 11, ~~further comprising wherein a~~ Java application executing within said computer system ~~for receiving~~ receives said input signal from said microphone;

—— ~~said Java application for encrypting~~ encrypts said input signal utilizing public key encryption to form the encrypted input signal; and

—— ~~said Java application for passing~~ passes said encrypted input signal from said Java application to said conventional cellular telephone.

15. (Currently Amended) The system according to claim 11, ~~further comprising wherein~~ said computer system ~~for~~ is capable of passing said encrypted input signal from said computer system to a microphone port included in said conventional cellular telephone.

16. (Currently Amended) The system according to claim 11, further comprising:

a second conventional cellular telephone, said second conventional cellular telephone being incapable of independently encrypting or decrypting signals;

a second computer system coupled between an external speaker and said second conventional cellular telephone, wherein outputs from said second conventional cellular telephone are received first by said second computer system before being output to said speaker, said second computer system being separate and apart from said second conventional cellular telephone;

said second computer system ~~for~~ capable of receiving an encrypted output from a speaker port included within said second conventional cellular telephone;

said second computer system ~~for~~ capable of decrypting said encrypted output utilizing public key encryption to form decrypted output; and

said second computer system ~~for~~ capable of outputting said decrypted output from said second computer system to said speaker.

17. (Currently Amended) The system according to claim 16, ~~further comprising wherein~~ said computer system ~~for~~ is capable of encrypting said input signal utilizing a key pair to form the encrypted input signal, said key pair including a public key and a private key.

18. (Currently Amended) The system according to claim 17, ~~further comprising wherein~~ said computer system ~~for~~ is capable of encrypting said input signal utilizing said public key to form the encrypted input signal.

19. (Currently Amended) The system according to claim 18, ~~further comprising:~~
—— ~~wherein~~ said second computer system ~~for~~ is capable of obtaining said private key of said computer system; and
—— ~~wherein~~ said second computer system ~~for~~ is capable of decrypting said encrypted input signal utilizing said private key to form the encrypted input signal.

20. (Currently Amended) The system according to claim 19, ~~further comprising wherein~~ said computer system ~~for~~ is capable of exchanging said private key between said computer system and said second computer system prior to ~~transmissions~~ transmission of cellular telephone signals.

21. (Currently Amended) ~~A computer program product executing within a data processing system for securing cellular telephone transmissions utilizing a conventional cellular telephone, said computer program product comprising the data processing system implemented steps of:~~
—— ~~instruction means for providing a conventional cellular telephone, said conventional cellular telephone being incapable of independently encrypting or decrypting signals;~~
—— ~~instruction means for providing a computer system coupled between an external microphone and said cellular telephone, wherein inputs into said cellular telephone are received first by said computer system, said computer system being separate and apart from said cellular telephone;~~

A computer program product comprising:

—— a computer usable medium having computer usable program code for securing a cellular telephone transmission utilizing a conventional cellular telephone, said computer program product including:

computer usable program code for first receiving inputs intended for the conventional cellular phone into a computer system coupled between an external microphone and the conventional cellular telephone, wherein the conventional cellular telephone is incapable of encrypting or decrypting signals and wherein the computer system is separate and apart from the conventional cellular telephone;

~~instruction means~~ computer usable program code for receiving, within said computer system, an input signal from said microphone;

~~instruction means~~ computer usable program code for encrypting, within said computer system, said input signal utilizing public key encryption to form an encrypted input signal;

~~instruction means~~ computer usable program code for passing said encrypted input signal from said computer system to said conventional cellular telephone; and

~~instruction means~~ computer usable program code for transmitting said encrypted input signal utilizing said conventional cellular telephone, wherein cellular telephone transmissions from said conventional cellular telephone are secured.

22. (Currently Amended) The computer program product according to claim 21, further comprising ~~instruction means~~ computer usable program code for encrypting, within said computer system, said input signal utilizing a key pair to form the encrypted input signal, said key pair including a public key and a private key.

23. (Currently Amended) The computer program product according to claim 22, further comprising ~~instruction means~~ computer usable program code for encrypting, within said computer system, said input signal utilizing said public key to form the encrypted input signal.

24. (Currently Amended) The computer program product according to claim 21, further comprising:

~~instruction means~~ computer usable program code for receiving, within a Java application executing within said computer system, said input signal from said microphone;

~~instruction means~~ computer usable program code for encrypting, utilizing said Java application, said input signal utilizing public key encryption to form the encrypted input signal;

~~instruction means~~ computer usable program code for passing said encrypted input signal from said Java application to said conventional cellular telephone.

25. (Currently Amended) The computer program product according to claim 21, further comprising ~~instruction means~~ computer usable program code for passing said encrypted input signal from said computer system to a microphone port included in said conventional cellular telephone.

26. (Currently Amended) The computer program product according to claim 21, further comprising:

~~instruction means for providing a second conventional cellular telephone, said second conventional cellular telephone being incapable of independently encrypting or decrypting signals;~~

~~instruction means for providing a second computer system coupled between an external speaker and said second cellular telephone, wherein outputs from said second cellular telephone are received first by said second computer system before being output to said speaker, said second computer system being separate and apart from said second cellular telephone;~~

computer usable program code for receiving outputs from a second conventional cellular telephone at a second computer system, wherein the outputs are received before being output to an external speaker between the second conventional cellular telephone and the second computer system, wherein the second conventional cellular telephone is incapable of independently encrypting or decrypting signals, and wherein the second computer system is separate and apart from the second conventional cellular telephone;

~~instruction means~~ computer usable program code for receiving, within said second computer system, an encrypted output from a speaker port included within said second conventional cellular telephone;

~~instruction means~~ computer usable program code for decrypting, within said second computer system, said encrypted output utilizing public key encryption to form a decrypted output; and

~~instruction means~~ computer usable program code for outputting said decrypted output from said second computer system to said speaker.

27. (Currently Amended) The computer program product according to claim 26, further comprising ~~instruction means~~ computer usable program code for encrypting, within said computer system, said input signal utilizing a key pair to form the encrypted input signal, said key pair including a public key and a private key.

28. (Currently Amended) The computer program product according to claim 27, further comprising ~~instruction means~~ computer usable program code for encrypting, within said computer system, said input signal utilizing said public key to form the encrypted input signal.

29. (Currently Amended) The computer program product according to claim 28, further comprising:

~~instruction means~~ computer usable program code for obtaining, by said second computer system, said private key of said computer system; and

~~instruction means~~ computer usable program code for decrypting said encrypted input signal utilizing said private key to form the decrypted input signal.

30. (Currently Amended) The computer program product according to claim 29, further comprising ~~instruction means~~ computer usable program code for exchanging said private key between said computer system and said second computer system prior to ~~transmissions~~ transmission of cellular telephone signals.